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New IBM color display a big switch

Don't be seduced by all the good deals now available for almost-compatible VGA controller boards. For most people the improvement is not needed. And for those who want the change, it's better to wait anyway.

Here's why. Every personal computer has a video controller card or comparable circuitry that drives the video display. But IBM's new Video Graphics Array, which is built into its new PS/2 line of personal computers, is likely to become the new standard for personal computers. It makes no sense to upgrade unless you can be assured that the board you're buying is 100 percent VGA-compatible. The current boards don't make that claim.

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The true VGA boasts much higher resolutions and colors than the current Enhanced Graphics Adaptor standard or the older Color Graphics Adaptor standard.

Since VGA is analog instead of digital, it provides for an almost infinite number of shades in each primary color. EGA can't display more than 16 out of a palette of 64 colors, while VGA provides 256 hues out of a palette greater than 256,000. VGA, therefore, offers more realistic images.

Third-party vendors are now beginning to announce 100 percent compatible VGA boards. These boards are designed to upgrade the video display of your IBM PC, XT or AT to the resolution used by the new PS/2 computers, and to act identically to IBM's own board.

But some of these vendors have been manufacturing EGA-compatible boards that approach VGA capabilities for some time — and these are the ones that are most commonly advertised at bargain basement prices.

Take note: your current CGA- or EGA-driven monitor won't support a VGA-type video board. You'll need a multiscanning monitor such as the NEC Multisync or the Sony Multiscan to use the board's capabilities.

So, why should you bother to upgrade your existing IBM or compatible system? You'll get greater resolution or sharpness. IBM's old CGA standard offered only four colors with a pixel resolution of 320 X 200. That's the number of horizontal dots of light (320) multiplied by the number of vertical picture elements (200) for a total of 64,000 pixels. CGA also offered 2 colors in 640 X 200 or 128,000-pixel resolution.

The IBM EGA video controller was a tremendous breakthrough in display technology. It offered 16 colors in 640 X 350 resolution, which is suitable for most business graphics. And now the VGA allows for 16 colors in 640 X 480 resolution and a fantastic 256 colors in 320 X 200 resolution.

For business purposes, here are some reasons for using a high-resolution VGA display:

✔ For displaying graphics or giving presentations, VGA offers true-to-life quality similar to that of a television set. EGA is more crude, and CGA is hardly presentable in a business environment today.

✔ For word processing, a higher VGA resolution makes characters much easier to read. Text resolution is 720 X 400, and VGA's character-cell dots are greater than those of CGA and EGA.

✔ For technical applications, industrial design, architecture and engineering, high resolution makes an obvious, big difference.

EGA is still an acceptable standard for 95 percent of business applications today. For most of us, that's as much graphics capability as we need. If you want more, you can purchase a new PS/2 instead. My suggestion in this case: buy the PS/2 and use your older computer as a back-up system.